
EMS 101 IMPLEMENTATION OVERVIEW



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EMS Implementation Strategy Development/Training

EMS IMPLEMENTATION OVERVIEW

Topic 1 Background Knowledge



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What is a Navy EMS?

- It is the part of the overall management system that includes:
 - Organizational Structure
 - Planning Activities
 - Responsibilities
 - Practices, Procedures, Processes, and
 - Resources
- for developing, implementing, achieving, reviewing, and maintaining the environmental program, and achieving environmental goals.

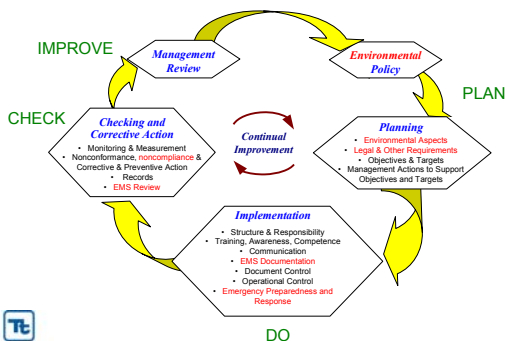


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Continual Improvement Environmental Management System



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Drivers

- Chapter 20: 5090.1B – Sept 1999
- Executive Order 13148 – April 26, 2000
- Navy EMS Policy – Dec 6, 2001
- DOD EMS Policy – April 5, 2002
- OUSD Memorandum (DoD Metrics) – Jan 30, 2003

Guidance

- EQA Guide – Sept. 1999
- Navy EMS Guide
- ISO 14001



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Chapter 20, 5090.1B

- Establish a communication forum
- Conduct awareness training
- Internal Assessment
 - Develop Internal Assessment Plan (IAP)
 - Conduct Annual Compliance Evaluations
 - May include EMS review
 - Documentation (Deficiencies, RCA, POAMs)
 - Annual EQA Report
- External Assessment
 - External assessment plan
 - Annual document review of IAP and EQA report (plus other environmental performance data)
 - Site visit to evaluate EMS and IA program (may include compliance review)
 - EA report (draft, out brief, final)
- Claimant EQA Summary report to CNI



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Environmental Quality Assessment (EQA) Guide

- Guidance for planning and implementing an EQA program that describes:
 - EQA Ashore (background)
 - An EMS review
 - A generic EMS implementation guide
 - The Internal Assessment
 - The External Assessment
 - Problem-solving techniques
 - EQA tools



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Executive Order 13148—Greening the Government through Leadership in Environmental Management

- Wednesday, April 26, 2000.
- PART 4 — Promoting Environmental Management and Leadership.
- Mandates EMS across ALL 16 agencies in the Executive Branch.
- Pilot projects in place by March 31, 2002.
- All appropriate facilities by December 2005.



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Appropriate Facilities

- EO 13148
 - Based on facility size, complexity, and the environmental aspects of facility operations
 - Has registered an environmental requirement with the U.S. EPA, or regional, state, local regulatory authority
- For the Navy, "appropriate agency facilities"
 - Navy shore installations
 - Regional complexes covered by the Navy's EQA Program
 - United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, and the Northern Mariana Islands.
 - Others encouraged within existing resources.



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EO 13148 Primary Goals

1. Develop and Implement an EMS
2. Ensure compliance
3. Fully implement Community Right-to-know
4. Reduce releases of toxic chemicals
5. Reduce use of toxic and HM
6. Reduce use of ODS
7. Institute environmentally sound landscaping practices



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DoD EMS Implementation Policy

- Requires EMS across all missions, activities, and functions
- Work to integrate EMS into all core business areas
- Promote interoperability within DoD, and nations, militaries and industry
- Encourages complementary systems for safety and health
- Allows for 3rd party registration when beneficial to mission



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DOD Implementation Metrics

- Starting Dec 2003: Semi-annual reporting
 1. Gap Analysis
 2. Signed Environmental policy statement
 3. Ranking of environmental aspects*
 4. EMS Implementation plan
 5. Management Review of system
 6. Training of appropriate personnel*
- CNI/N45 addition:
 - EMS Description Document (Element #9)
 - Documented Management Review (Element #17)



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DoD EMS Challenges

- Culture change: "compliance" and "improvement"
- Recognize it's a management process...not another environmental program
- Establish leadership support
- Get core mission organizations involved early-on
- Know external stakeholders and their priorities
- Listen and respond to stakeholders: build trust
- Develop productive EMS partnerships with regulators
- Identifying resources (manpower and funding)

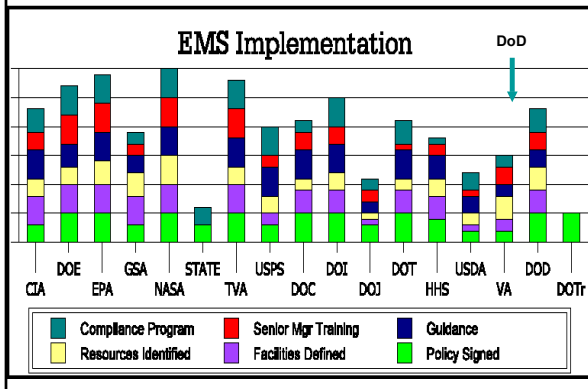


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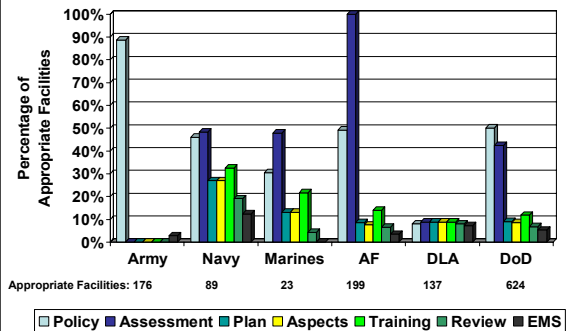
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DoD Progress to Date: Federal Metrics



DoD EMS Implementation Metrics

Data As of February 2004



DoD Facilities with EMS In-place

33 DoD facilities with EMS in-place as of February 04

DLA: 10

Defense National Stockpile Center (DNSC) HQ, Fort Belvoir, VA
DNSC Baton Rouge Depot, LA
DNSC Binghamton Depot, NY
DNSC Curtis Bay Depot, MD
DNSC Hammond Depot, IN
DNSC New Haven Depot, IN
DNSC Point Pleasant Depot, WV
DNSC Scotia Depot, NY
DNSC Somerville Depot, NJ
DNSC Warren Depot, OH

Army: 5

Fort Lewis, WA
Scranton Army Ammunition Plant, PA
Pine Bluff Chemical Demilitarization Facility, AR
Wide Area Munitions Program Office
US Army Tank-Automotive Research and Development Center (TARDEC), Detroit Arsenal, MI



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DoD Facilities with EMS In-place

33 DoD facilities with EMS in-place as of February 04

Navy (Partial Listing): 11

Naval Air Engineering Station Lakehurst, NJ
Naval Air Depot North Island, Coronado, CA
Naval Undersea Warfare Center Division Newport, RI
Naval Undersea Warfare Center Division Keyport, WA
Supervisor of Shipbuilding, Groton, CT
Navy Lewis and Clark Class Ship Acquisition Program Office (T-AKE), Crystal City, VA

Air Force: 7

Thule AB, Greenland
177FW, Atlantic City, NJ
173FW, Klamath Falls, OR
Eglin AFB, FL
Robbins AFB, GA
Des Moines ANGB, IA
Ft. Wayne ANGB, IN
Great Falls ANGB, MT



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Proposed EMS Scorecard Criteria for 2004

➤ Agency Level

- Agency has incorporated the EMS goals and requirements of E.O. 13148 into existing agency environmental directives, policies and documents?
- Agency has issued a Self-Declaration Protocol based on the Federal Self Declaration Protocol guidance?
- Agency has provided resources (e.g., dollars, FTE) for EMS implementation to its appropriate facilities?

➤ Facility Level

- Number of appropriate facilities that have documented measurable environmental objectives and targets.
- Number of appropriate facilities that have established environmental management programs specifically to achieve each of their environmental objectives and targets.
- Number of appropriate facilities that have developed a program for EMS awareness training.



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Looking Ahead

- Develop formal DoD EMS policy
 - Build the team
 - Revise DoDD 4715.1, *Environmental Security*
- Oversee progress toward 31 Dec 05 EMS goal
 - Oversee Service-specific implementation – metrics
 - Track facilities with EMS -- *Self Declaration Protocol*
 - Develop plan for initial "system" audits
- Prepare for EMS "operation"
 - Focus on coordinated *use of the EMS* to guide, enable, and track progress
 - Focus on mission*: "local" mission-oriented objectives and targets...and metrics



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Take-Aways for EMS Implementation

- Administration and DoD support is strong
- Senior leadership support is essential
- *Performance* is more important than *conformance*
- EMS implementation is a team-building process (Inside and outside the fence line)
- Changes in operator behavior hold great potential for mission enhancements
- Good community relations are critical to sustainable operations
- Other DoD components

Navy EMS Guide

- **Environmental Policy**
- **Planning**
 - Environmental Aspects
 - Legal and Other Requirements
 - Environmental Objectives & Targets
 - Management Actions to Support O&Ts
- **Checking and Corrective Action**
 - Monitoring and Measurement
 - Nonconformance, Noncompliance and Corrective and Preventive Action
 - Records
- **Implementation**
 - Structure and Responsibility
 - Training, Awareness and Competence
 - Communication
 - EMS Documentation
 - Document Control
 - Operational Control
 - Emergency Preparedness and Response
- **Management Review**
- EMS Review



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ISO 14001 Requirements

- 4.1 — General Requirements
- 4.2 — Environmental policy
- 4.3 — Planning
- 4.4 — Implementation and operation
- 4.5 — Checking and corrective action
- 4.6 — Management review



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ISO 14000 Family of Standards

- **ISO 14001**
- ISO 14004
- ISO 14015
- ISO 14020
- ISO 14021
- ISO 14024
- ISO TR 14025
- ISO 14031
- ISO TR 14032
- ISO 14040
- ISO 14041
- ISO 14042
- ISO 14043
- ISO TR 14047
- ISO 14048 (CD)
- ISO TR 14049
- ISO 14050
- ISO TR 14061
- ISO TR 14062
- ISO 14063 (CD)
- ISO 19011



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AUDIT CRITERIA

Standard against which the effectiveness of implementation may be judged

- Compliance to regulations
 - 40 CFR
 - 5090.1B Chapter 20
- Conformance to:
 - Navy EMS Policy
 - Navy EMS Guide
 - EQA Guide
 - ISO 14001
 - Base Instructions/SOPs



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Certification Scheme

- Accreditation
 - Registrars
 - Trainers
 - Auditors
- Registration/certification
 - Compete in world markets
 - Customer requirement
 - 3rd Party check

Self declaration is an option



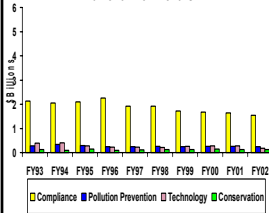
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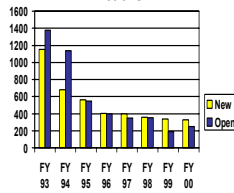
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Background

EQ Programs
Current FY02 Dollars



Compliance Enforcement
Actions



- Compliance-Based Programs have been a Resounding Success

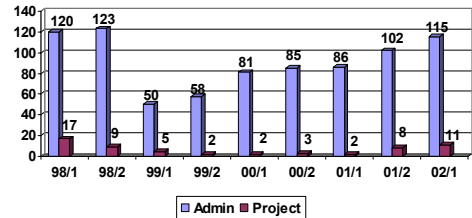


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United States Navy Compliance Enforcement Actions Resolution Admin/Operational - "Fix" vs. Project

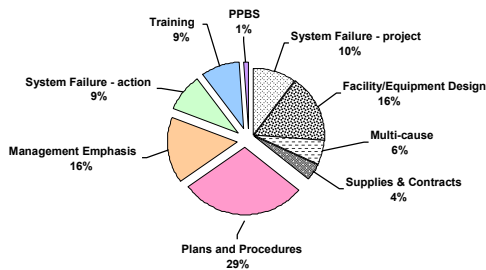


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Root Cause of NOV's Since Oct 1997



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Impacts and Risk

Impacts	Potential Risks to Mission
Degrade natural areas	<ul style="list-style-type: none"> ➤ Diminished utility for training operations ➤ Adverse public perception or noncompliance ➤ Potential mission shutdown.
Noncompliance/regulatory action	<ul style="list-style-type: none"> ➤ Fines ➤ Mission stoppage ➤ Lose access to critical resources ➤ Distraction and inefficient use of personnel resources
Adverse public perception	<ul style="list-style-type: none"> ➤ Lawsuits ➤ Mission stoppage ➤ Lose access to critical training areas ➤ Distraction and inefficient use of personnel resources
Human health and safety effects	<ul style="list-style-type: none"> ➤ Increased sick time ➤ Personnel injury and death ➤ Decreased individual performance



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Navy EMS Implementation Strategy

- Vision: The Navy will achieve environmentally **sustainable** operations.
- Goal: Use EMS to enable leaders to integrate environmental requirements into mission decision making.
- Navy EMS Working Group



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Sustainability

- "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs"
Brundtland Commission 1987
- Built environments that reduce our ecological footprint and promote better management of the natural resources on which we depend, at the least cost over the life of the development
- "Capacity for continuance into long term future"
Sustainability: Integrated Guidelines for Management (1999)



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Principles of Sustainability

- You can't dig stuff out of the Earth and spread it around indefinitely (Oil, Coal, Toxic Metals)
- You can't spread human-created stuff around in Nature indefinitely (Solvents, Synthetic Chemicals)
- Don't erode Nature's capacity to do all the wonderful things Nature does (Water Pollution, Erosion, Loss of Productive Land)
- Do business efficiently and make sure that everyone has enough



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A Sustainable Installation...

- Optimizes military training
- Provides for well-being of soldiers and family
- Mutually beneficial relationship with local community
- Is life cycle cost-effective to operate
- Systematically decreases dependence on:
 - Fossil fuels and mining
 - Non-biodegradable and toxic compounds
- Does not use up earth's resources faster than nature can regenerate them
- Operates within it's fair share of the earth's resources



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A Systems Approach

- Guiding Vision and Goals
- Organizing Framework
- Clear DIMC system
- Indicators and Assessment Criteria
- Comprehensive data collection for analysis
- EMS is a start:
 - Systematic approach to management
 - Based on comprehensive data collection
 - Priorities established



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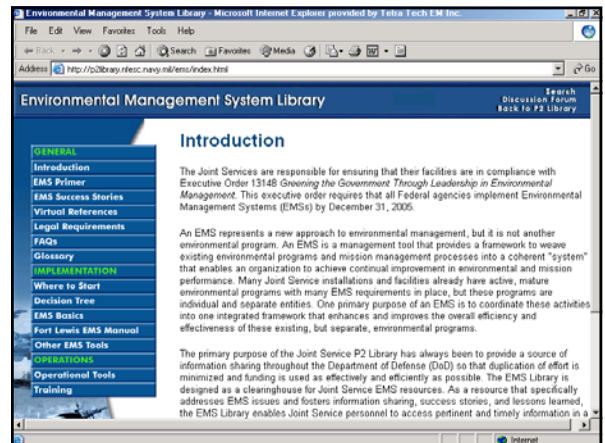
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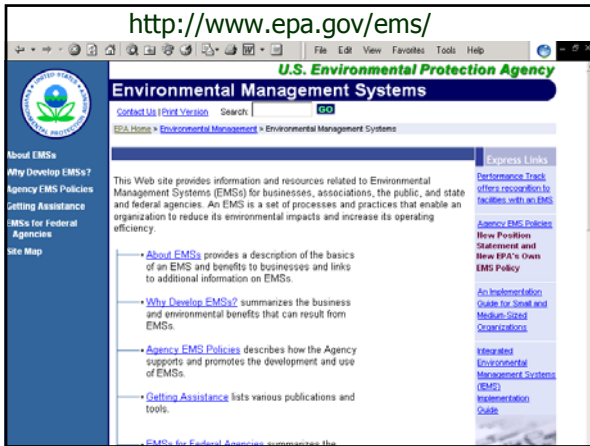


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<http://p2library.nfesc.navy.mil/>





Point-of-Contact

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- E-mail: mcvey.tami@hq.navy.mil



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Exercise

- Define the Navy Environmental Management System
- In your groups, discuss what an EMS is/should do and develop a definition.
- We will debrief as a class in 10 minutes.



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Why Implement An EMS?

- Support the military mission by reducing risk and improving the environmental compliance position.
- Provide formal training plans to ensure personnel understand how they can impact the environment.
- Establish facility-specific environmental policies, goals, objectives, or targets.



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Why Implement An EMS?

- Create commitment to going beyond compliance by continual improvement.
- Establish accountability by identifying roles and responsibilities.
- Effect better utilization of government resources.
- Facilitate turnover of staff without knowledge loss.
- Increase environmental management staff



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EMS IMPLEMENTATION OVERVIEW

Topic 2

EMS IMPLEMENTATION PROCESS



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What Is In Place Already?

- What already exists?
 - What works?
 - What doesn't?
- Where are the gaps?
- What other initiatives underway?
- Eliminate duplication
- Conduct an internal survey
- Identify interested and key personnel

[Gap Analysis Example.xls](#)

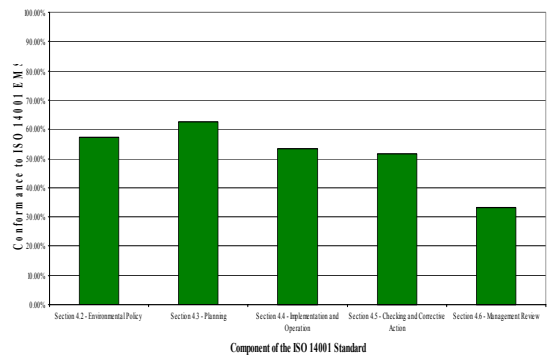


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ISO 14001 EMS Gap Analysis - NAS Corpus Christie



Gap Analysis

ISO 14001 EMS

Level of Effort

- | | |
|--|--|
| ➤ 4.2 — Environmental Policy | ➤ Management Commitment |
| ➤ 4.3 — Planning | ➤ EMS Champion |
| ➤ 4.4 — Implementation and Operation | ➤ Relative Significance of Environmental Aspects |
| ➤ 4.5 — Checking and Corrective Action | |
| ➤ 4.6 — Management Review | |

54.04% Conformity

57.56% Level of Effort

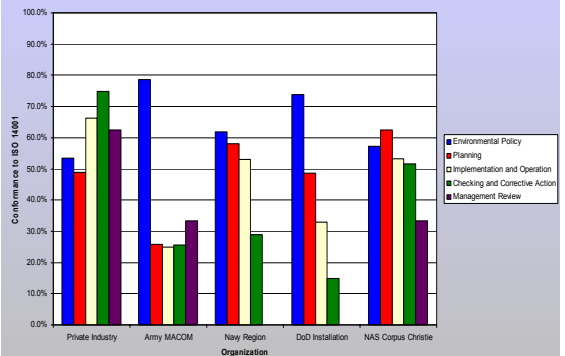


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Comparison of Organizations - EMS Gap Analysis



Management Responsibilities

- Provide adequate resources
- Active involvement
 - Environmental is considered in all operations
- Communication/Public relations
- Setting objectives and targets
- Designating EMP managers
- Management review



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Management Representative

Appoint (a) specific management representative(s) who, irrespective of other responsibilities, shall have defined roles, responsibilities and authority for:

- Ensuring that the EMS is established, implemented and maintained in accordance with requirements
- Reporting on performance of EMS to top management for review and as a basis for improvement of the EMS



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Implementation Team (IT)

- Cross functional group representing different levels and functions within the organizations
- Support MR in development of EMS, and overseeing and monitoring EMS activities
- Promoting EMS activities
- Ensure the systems continuing suitability and effectiveness in relation to changing conditions and information



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All employees have the responsibility to support the EMS

1. Understanding the Environmental Policy
2. Recognizing and accepting the importance of performing his/her job in accordance with defined procedures
3. Contributing to the achievement of the environmental objectives and targets relevant to his/her job
4. Complying with all environmental regulations and requirements
5. Practicing pollution prevention, reducing resource consumption and recycling
6. Identifying opportunities for continual improvement



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EMS Implementation Strategy

- Management's vision
- Define the scope of the EMS
 - Activities/Departments?
 - Tenants?
 - Suppliers and contractors?
 - Health and Safety?
- EMS description document
- Develop and maintain an implementation plan



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Documents vs. Records

- Documents describe how things are to be done (i.e. prescriptive)
- Records are objective evidence of activities performed, or results achieved (i.e. descriptive)

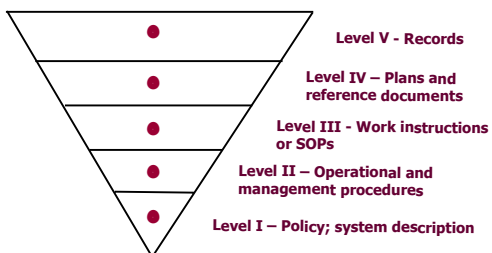


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Documentation Pyramid



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EMS Documentation (Element #9)

- Establish and maintain
- Leadership has approved
- Written EMS description document
- Describes:
 - EMS elements
 - Environmental Management Procedures
 - How elements relate to each other
 - Where related documents and records are maintained



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EMS Description Document

- Vision of the EMS
 - Management's pre-arranged plans
 - Overarching goals for the EMS
- Environmental Policy (Element #1)
- Key roles and responsibilities (Element #6)
 - Top management
 - Implementation Team
 - Management Representative
- Core EMS elements (Element # 9)
 - Level II Management Procedures
 - Linkages between elements
 - Where related documents may be found



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Document Control (Element #10)

- Establish and maintain
- Documented procedures
- Controlling all documents applicable to its EMS
- Ensure that:
 - they can be located
 - they are periodically reviewed and revised as necessary
 - the current versions of relevant documents are available when and where needed
 - obsolete documents are promptly removed from all points of issue and points of use, or otherwise assured against unintended use
 - Any obsolete documents retained for legal and/or knowledge preservation purposes are suitably identified



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Records (Element #15)

- Establish and maintain
- Documented procedures for:
 - Identification
 - Maintenance
 - Disposition
- Environmental records are:
 - legible, identifiable and traceable to the activity, product or service involved.
 - stored and maintained
 - readily retrievable
 - protected against damage, deterioration or loss



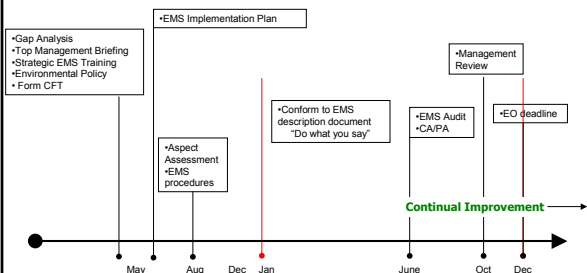
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Vendor	Software Product Name <small>Please click on the Software Product Name for more information</small>	Joint Service User <small>Please click on the Checkmark for more information</small>
Chemical Safety Corporation	Environmental Management Systems (EMS)	✓
Enviance®	The Enviance™ System	
Environmental Software Providers (ESP)	espEnvironmental™	
EnviroRisk Management Pty Ltd	Product A: AuditMASTER™ Product B: EMS Implementation Solutions	
GreenWare Environmental Systems Inc.	ISO 14000 Software Series	
Intelix Technologies Inc.	ISOsoft 14001	
isotop Global Partnership	Product A: TimeSaver CD Product B: Network & EMS Integration	✓
ISYS International Limited	Expert-Ease™	
Prism eSolutions	Product A: equation4SE™ Product B: equationNET™	✓
Tetra Tech NUS, Inc.	EnviroManager	✓
The Solution Foundry, LLC	EMSSolutions®	

EMS Implementation Milestones



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STRATEGY

- Cultivate active leadership in implementing
- Establish a strategic vision
- Maintain a strategic implementation plan
 - Integrate EMS with mission
 - Establish clear uniform metrics
- Cultivate employee involvement
- Have accountability
- Effective communication channels
- Have a structured documentation system
- Credible management review process



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EMS IMPLEMENTATION OVERVIEW

Topic 3 U.S. Navy EMS ELEMENTS



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Navy EMS Guide

- **Environmental Policy**
- **Planning**
 - Environmental Aspects
 - Legal and Other Requirements
 - Environmental Objectives & Targets
 - Management Actions to Support O&Ts
- **Checking and Corrective Action**
 - Monitoring and Measurement
 - Nonconformance, Noncompliance and Corrective and Preventive Action
 - Records
 - EMS Review
- **Implementation**
 - Structure and Responsibility
 - Training, Awareness and Competence
 - Communication
 - EMS Documentation
 - Document Control
 - Operational Control
 - Emergency Preparedness and Response
- **Management Review**



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Environmental Policy (Element #1)

- Signed by the commanding officer
- Commits to:
 - Compliance with relevant environmental legislation, regulations, and policy
 - Prevention of pollution
 - Continual improvement in performance of the EMS
- Documented
- Implemented
- Maintained
- Communicated to organization personnel
- Made available to the public



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Communication of Policy (Element #8)

Internal

- The environmental policy statement is a tool to gain buy-in
- INDOC and other training
- Base TV Station
- Intranet
- Bulletin boards
- Base newsletter

External

- Internet website
- Local newspaper
- Community outreach
- Other stakeholders
- Who are the stakeholders?



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Terms

- **ACTIVITIES, PRODUCTS AND SERVICES**
- **PRACTICES** are whatever a Navy organization does that can impact environmental resources.
- **ENVIRONMENTAL ASPECT** is a characteristic of a practice that can cause an impact to environmental and other resource(s).
- **IMPACT** is the effect on environmental and other resource(s) from an aspect of a practice.
- **RESOURCE (Environmental)**—Sensitive environmental receptors



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Environmental Aspects (Element #2)

- Established and maintain
- A documented procedure
- Identify the environmental aspects
- Activities, products, services or practices
- Incorporates new or changed missions, operations, activities, services or practices
- Documented environmental aspects
- Considered in setting environmental objectives.
- Keep information up-to-date.



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General Categories of Aspects

- Air emissions
- Asbestos in buildings
- Chemical usage
- Energy usage
- Noise
- Natural resource consumption
- Potential spillage
- Storm water contamination
- Waste generation
- Waste water generation
- Water usage



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Why A Detailed Assessment?

- Understanding environmental aspects sets the stage for:
 - Understanding P2 opportunities
 - Developing objectives and targets
 - Developing controls for critical processes
 - Identifying training needs
- The assessment provides information for management decisions



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Level Of Detail

- Gather data to the level needed to support the EMS
 - Objectives and targets
 - Operational controls
- Important to provide installations with a tool
- This is a continual improvement system – not expected to be perfect out the gate



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Practice



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Practice



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Environmental Impacts

- Build inventory of practices
 - Planning
 - Tracking of improvement
- Determine environmental aspects of each practice
- Determine impacts from environmental aspects:
 - Air and water quality degradation,
 - Poor community/regulator reputation
 - Increase financial burden
 - Reduced/enhanced health & safety
 - Reduced/enhanced mission readiness



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Terms

➤ Significant Environmental Aspect

An environmental aspect that can or does have significant impact on the environment



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Significance Ranking

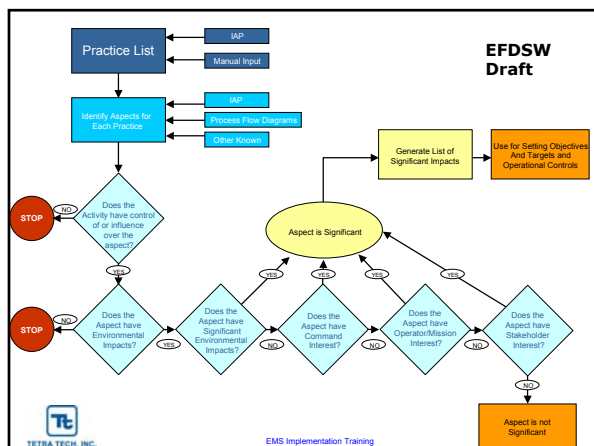
- Ranking scheme should address relative significance of impacts using risk analysis
- Important for effective resource allocation
- Based on established criteria developed by installation personnel
- Practices and impacts subject to regulatory requirements rank high



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Significance Ranking

- **Highest, 5 points** – Relative costs in the top 20% (81-100%) of the range for all individual installation impacts;
- **High, 4 points** – Relative costs in the second 20% (61-80%) of the range for all individual installation impacts;
- **Medium, 3 points** – Relative costs in the third 20% (41-60%) of the range for all individual installation impacts;
- **Low, 2 points** – Relative costs in the fourth 20% (21-40%) of the range for all individual installation impacts
- **Lowest, 1 point** – Relative costs in the lowest 20% (0 to 20%) of the range for all individual installation impacts.



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Assess Environmental Risk

Severity Categories	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	1	2	6	8	9
Critical	3	5	7	10	15
Marginal	4	11	12	14	17
Negligible	13	16	18	19	20



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Hazard Categories and Risk Levels

Hazard categories	Risk Levels	Relative Risk Score
01-04	Extremely High	5 points
05-08	High	4 points
09-12	Medium	3 points
13-16	Low	2 points
17-20	Lowest	1 points




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Regulatory Implications

<p>5 points = Regulated Aspect – Not in compliance and a substantive NOV (such as one with fines or penalties) has been issued. <i>(Automatically Significant)</i></p>
<p>4 points = Regulated Aspect - Not in compliance but an enforcement action has not been initiated (<i>i.e.</i>, ECAMP finding), or a less substantive NOV has been issued. <i>(Automatically Significant)</i></p>
<p>3 points = Regulated Aspect – Currently in compliance.</p>
<p>2 points = Regulated Aspect – Currently below regulated thresholds; would likely become regulated if thresholds are reduced or activity increases.</p>
<p>1 point = Unregulated Aspect</p>




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Potential Mission Degradation

Mission Impact Scale	Mission Degradation Considerations
5 = Loss of ability to accomplish mission (Automatically Significant)	➤ Training Area Restrictions
4 = Serious mission restrictions	➤ Activity Restrictions
	➤ Intensity Restrictions.
3 = Moderate mission restrictions	➤ Duration Restrictions
	➤ Permanent Deactivation of the Training Area
2 = Minor mission restrictions	➤ Temporary Rehabilitation of the Training Area
1 = No mission restrictions	➤ Costs
	➤ Personnel

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<h1>Assess community concern</h1>	
Community Concern Scale	Community Concern Considerations
5 = Public outcry / lawsuits	<ul style="list-style-type: none"> ➤ Lawsuits
4 = Serious community concern	<ul style="list-style-type: none"> ➤ Obstruction efforts
3 = Some community concern	<ul style="list-style-type: none"> ➤ Number and scope of community complaints
2 = Community is unconcerned but could easily become so.	<ul style="list-style-type: none"> ➤ Negative / positive press coverage
1 = Community supports the activity or community is unconcerned with the activity.	<ul style="list-style-type: none"> ➤ Citizen-generated Congressional or regulator interest
	<ul style="list-style-type: none"> ➤ Level of constructive interaction with the community



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Relative Cost Score
+ Environmental Risk Score
+ Regulatory Implications Score
+ Potential Mission Degradation Score
+ Community Concern Score

= OVERALL IMPACT SCORE

Worksheet 3-2: Exposure to Chemicals and Materials										
Operation	Aspect	Quantity* Used per time period	Exposure Time		Personal Protective Equipmen t (PPE)	Pathway		Rank Exposed Groups		
		Duration**	Frequency		Human: Inhalation, Dermal, Oral	Environ- ment: air, water, land	Workers	Community	Environ- ment	
press cleaning	acetone, toluene, MEK, isopropyl alcohol blend as releases	24 oz. per day	10 min.	5 times per day	gloves	inhalation	air, water	H w/o PPE	L	ML
Contact Person:			Date Completed							

Worksheet 3-5a-2 Criteria to Determine Significant Aspects: Toner Cartridge Example²

Operation	Aspects	Regulatory Concerns	Chemical and Material Risk			Worker Safety	Other Community Issues ²	Natural Resources ²	Overall Ranking
			Worker ERExp	Community ERExp	Environment ERExp				
Copying	Paper Use								
	Toner (Input)	M	L/L	L/L	L/L	L		L	M-L
	Documents								
	Waste Paper								
	Used toner (Out)	M-H	L/L	L/L	H/H	L		M-H	M-H
	Odors								
Contact Person:						Date Completed:			

Significant Environmental Aspects

- Prioritize
- Measure
- Track
- Study
- Maintain
- Improve
- Procedure
- Available Tools



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Environmental Aspect Review - [Aspect Designation]

Aspect Designation Form

Building: Building #:
 Location:
 Process:

Select Aspects

Set as Default

Use Default

Aspect

- Waste generation - Oil
- Chemical Storage
- Chemical Usage
- Energy usage - Electricity
- Air emissions - Fugitive
- Waste generation - Oil dry/spill socks
- Potential spillage - Oil
- Potential spillage - Chemical
- Potential spillage - Fluids

Environmental Aspect Review - [Aspect Significance Prioritization]

Aspect Significance Prioritization Form

Building Name:
 Building Number: Location:
 Process Name:
 Environmental Aspect:

Impact:
 Impact Comments:

Legal Regulation:
 Legal Regulation Comments:

Policy:
 Policy Comments:

Cost:
 Future Cost to Correct:

Perception:
 Perception Comments:

Pollution Prevention Potential:
 Management Controls:

Environmental Aspect Review - [Reports]

Reports

- ☐ Environmental Aspects Report
- ☐ Aspect Significance Report
- ☐ Building Aspect Report
- ☐ Building List
- ☐ Ranking Reports
- ☐ Aspects Matrix
- ☐ Process Matrix
- ☐ Return to Main Menu

Environmental Aspect Review - [rptRankingsAspectavg - Report]

AVERAGE ASPECT RANKINGS

Ranking	Environmental Aspect	Score
1	Waste generation - Waste oil/slug	201
2	Waste generation - Fluorescent tubes/halogen	280
3	Potential spillage - Fuels/oils	275
4	Potential spillage - Chemical	275
5	Waste generation - Toner Cartridge	271
6	Waste water discharge	270
7	Chemical Usage	266
8	Lead paint	265
9	Waste generation - Oily rags	240
10	Waste generation - Tires	235
11	Waste generation - Oil	235
12	Waste generation - Maintenance fluids	235
13	Waste generation - JP-5 (re-use)	235

Environmental Aspect Review - [pptRankingsProcess - Report]

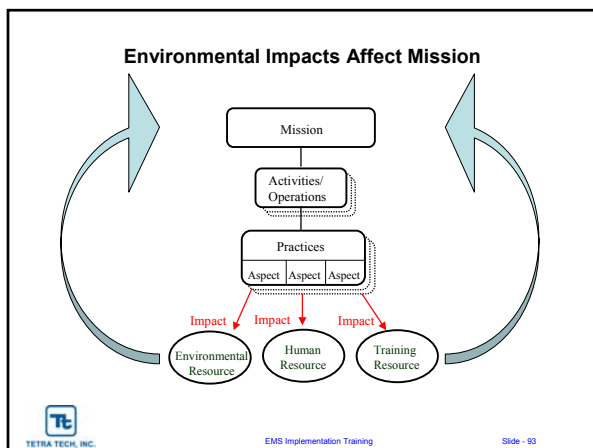
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100%

PROCESS RANKINGS

Ranking	Process Name	Score
1	Office	37598
2	Maintenance - Equipment	14449
3	Vehicle Maintenance and Repair	12849
4	Chemical storage - HazMat locker	9185
5	Laboratory	8094
6	Aircraft maintenance - Intermediate level	8073
7	Storage/Warehouse	7636
8	Waste storage - hazardous	6775
9	Boiler - Conventional system	6407
10	Aircraft maintenance - Organizational level	6375
11	Chemical storage - Outside	5799

Page: 1

[illegible]

Considerations

Objectives should be formulated after consideration of:

- Legal and other requirements
- Significant environmental aspects
- Technological options
- Financial requirements
- Operational requirements
- Business requirements
- Views of interested parties
- Objectives should support the mission



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Types of Objectives

➤ **Performance** based on achieving:

- A reduction in a number, percentage, or quantity
- Direct reduction or elimination of impact to environment

➤ **System** based on achieving:

- Improvement to the system
- Indirect reduction or elimination of impact to environment



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Environmental Objectives & Targets (Element #4)

- Established and maintain
- Documented objectives & targets
 - Each relevant function and level
 - Reflect risks to mission
 - Consistent with and supportive of the environmental policy and requirements
 - Achievable within economic and technological restraints



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EO13148–Driven Objectives

1. EMS in place by 31 December 2005
2. Compliance
3. Right-to-Know and P2
4. TRI chemical release reduction
5. Toxic chemical/hazardous substance use reduction
6. ODS reduction
7. Landscaping



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Sustainability–Driven Objectives

- Landfill waste to be aggressively reduced toward 0 by 2025.
- Meet minimum platinum standard for all construction by 2020 program, and renovate 25% of all existing structures to at least a bronze standard by 2020 (using the Sustainable Project Rating Tool – SPiRiT).
- Develop and implement an effective regional commuting program by 2015.
- Work towards 100% Environmentally Preferred Purchasing by 2025 for all purchases, including government purchase card, contract, and military requisition.



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EMS Targets

- Need to be met in order to achieve objectives.
- Targets should be:
 - Specific
 - Measurable
 - Achievable
 - Realistic
 - Timely
 - Evaluated
 - Reviewed



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Factors to Consider When Setting Objectives and Targets

- Who establishes?
- Ability to Control
- Ability to Track and Measure
- Cost to Track and Measure
- Progress Reporting
- Links to Policy Commitments
- Normalization Factors



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Sample Objectives and Targets

Objective: Reduce solid waste generation

Target: 10% reduction by 09-15-04 compared to 2002 levels

Objective: More effective promotion of EMS

Target: Develop and implement plan by 07-15-03

Objective: Reduce reportable spills

Target: Train all shop personnel on proper fuel handling procedures during third quarter

Objective: Assessment of operational controls

Target: Complete all processes by 12-31-03



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Management Actions to Support Objectives and Targets (Element #5)

- Identify actions to achieve objectives and targets:
 - Responsible party(ies)
 - Timeframes
 - Within the means of the commanding officer
- Identifies projects necessary to achieve objectives and targets:
 - Requiring funding
 - Uses PPBS tools and procedures to request funding
 - Uses risk assessment results to support PPBS funding requests



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Environmental Management Plans

- The "road map" or action plan for [achieving objectives and targets](#)
- Designate responsibility for achieving objectives and targets at each relevant function and level
- Establish the means and timeframe by which they are to be achieved
- Should address:
 - Schedules
 - Resources
 - Responsibilities
 - Should be dynamic
 - Revised on a regular basis



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EMPs should...

- Communicate expectations and responsibilities (i.e. accountability)
 - Task
 - Deadline
 - Point of contact
- Clearly document actions planned and taken
- Build on existing EHS programs/plans
- Be reviewed on a regular basis



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Navy EMS Guide

- **Environmental Policy**
- **Planning**
 - Environmental Aspects
 - Legal and Other Requirements
 - Environmental Objectives & Targets
 - Management Actions to Support O&Ts
- **Checking and Corrective Action**
 - Monitoring and Measurement
 - Nonconformance, Noncompliance and Corrective and Preventive Action
 - Records
 - EMS Review
- **Implementation**
 - Structure and Responsibility
 - Training, Awareness and Competence
 - Communication
 - EMS Documentation
 - Document Control
 - Operational Control
 - Emergency Preparedness and Response
- **Management Review**

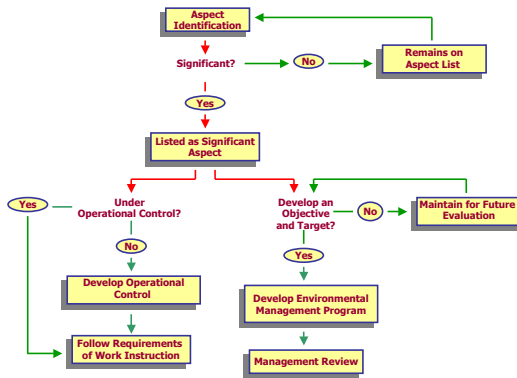


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Process to Use Aspect Assessment Information



Definition Operational Control

Controls that ensure operations and activities do not exceed specified conditions or performance standards, or violate regulatory compliance limits.



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Operational Control (Element #11)

- Identified those operations and activities that are associated with the identified significant environmental aspects
- Establish and maintain
- Documented procedures
 - Absence lead to deviation from environmental policy and objectives & targets
 - Stipulate operating criteria
 - Related to the identifiable significant environmental aspects of goods and services used
- Communicate relevant procedures to suppliers and contractors



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Administrative Controls

- Work instructions/inspections

Establish and maintain documented procedures where the absence of a procedure could cause a noncompliance, environmental impact, deviation from policy or objectives and targets
- Stipulate operating criteria
 - Method and specifications of operation
 - Waste management methods
 - Maintenance requirements
 - Monitoring and documentation required
 - PPE required
 - Reference to related documents



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Training, Awareness and Competence (Element #7)

- Identified, provided, and documented training and instruction
 - comply with regulations
 - ensure that appropriate personnel understand their responsibilities for implementing the EMS
 - ensure practice owners understand specific procedures to control environmental impacts



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Structure and Responsibility (Element #6)

- Define, document
- Communicated
- EMS roles, responsibilities, and authorities for:
 - implementation and sustainment of the EMS
 - management of environmental programs
 - procedures for control of activities, products and services



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Communication (Element #8)

- Establish and maintain
- Documented procedures relative to the EMS
 - Internal
 - External



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Emergency Preparedness and Response (Element #12)

- Establish and maintain
- Documented procedures for
 - Identifying and responding to accidents and emergencies
 - Mitigating environmental impacts
- Review and revise
 - When new practices are initiated
 - After the occurrence of accidents or emergencies
- Communicate to practice owners



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Monitoring and Measurement (Element #13)

- Establish and maintain
 - Documented procedures
 - Key characteristics of its operations and activities
 - Assigned roles and responsibilities
-
- Established procedures or mechanisms to track progress in meeting Objectives and Targets
 - Established performance indicators or metrics to measure progress in accomplishing Objectives and Targets
-
- Monitoring equipment is calibrated and maintained and records retained
-
- Established and implemented a comprehensive internal assessment plan (IAP)



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Nonconformance, Noncompliance, and Corrective and Preventive Action

- Establish and maintain – Documented procedures
 - Defined responsibilities and authority
 - Handling and investigating
- Implemented and recorded any changes in the documented procedures from CA/PA
- Documented nonconformance and noncompliance deficiencies
 - Recommend corrective actions/problems solving efforts
 - POA&M for recommended corrective actions
- Annual EQA Report
 - Problem solving/corrective actions
 - Updated internal assessment plan



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EMS Review (Element #16)

- Establish and maintain
- Documented procedures
- Periodic EMS reviews to determine
 - Conformity to Navy EMS policy
 - EMS is properly implemented and maintained
- Provide information on the results of reviews to management



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Management Review (Element #17)

- Sr. Management reviews the EMS
 - Ensure its continuing suitability
 - Adequacy
 - Effectiveness
- Process ensures
 - Appropriate information for review collected
 - Management review is documented.
- Address the need for changes to
 - Environmental policy
 - Objectives
 - Other elements of the EMS

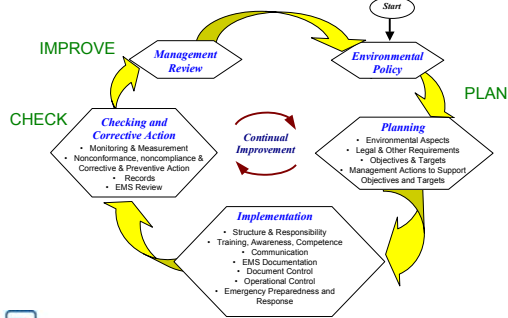


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Continual Improvement Environmental Management System



Recognition

- Meaningful Metrics are Crucial to Showing Continual Improvement
- EPA's National Environmental Performance Track
- State Incentive Programs
- Presidents Closing Circle Award
- Navy/DoD Installation Award

Exercise

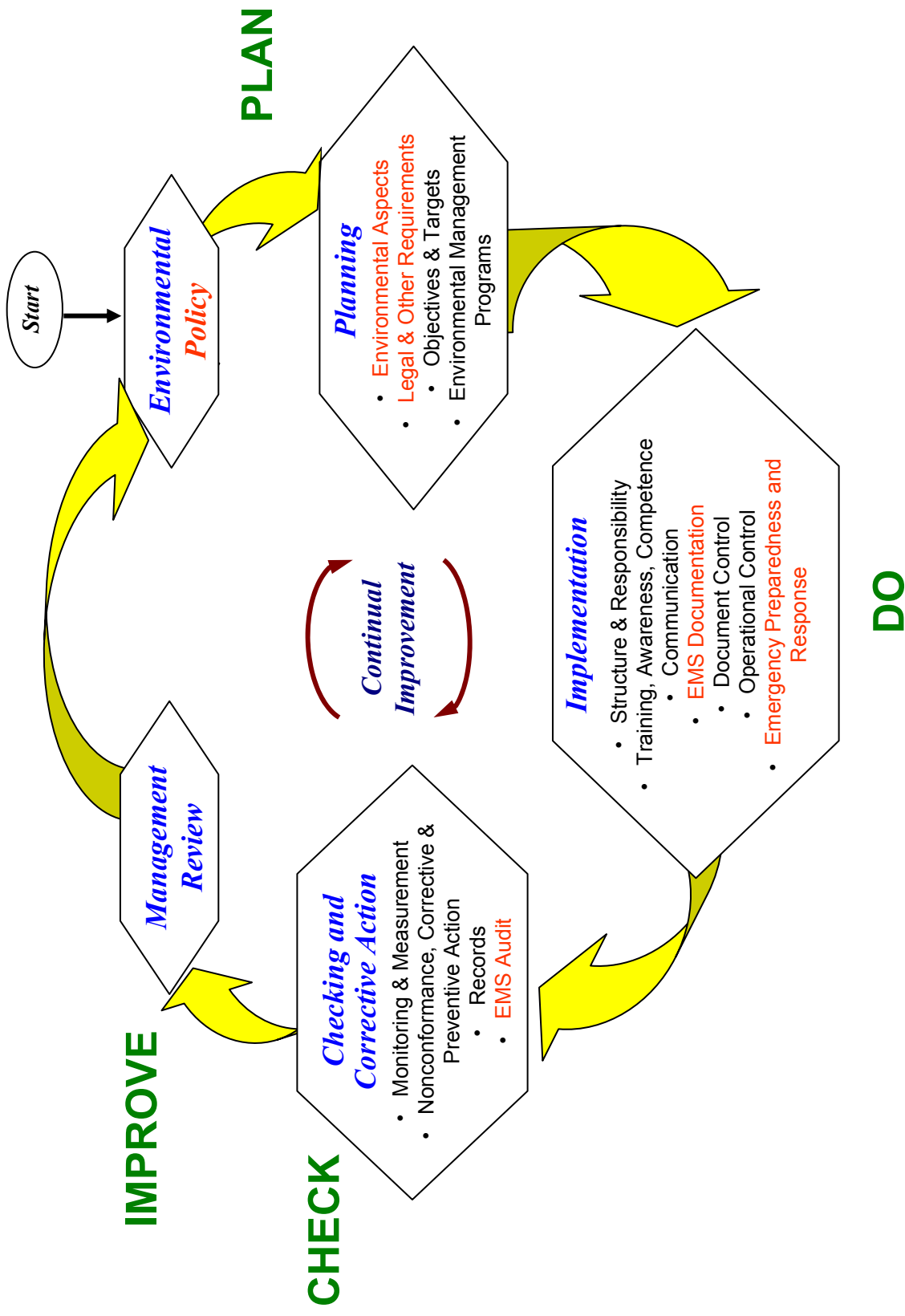
Individually write down five things you can do starting next Monday morning to begin the EMS development and implementation process

Summary

- Please complete course critique forms
 - Collect your certificates
 - E-mail/call Tami McVey with comments
 - Need assistance or have questions...please call/e-mail us:
- Philip.Wood@ttemi.com or (901) 726-9914
Harry.Kemp@ttemi.com or (731) 660-2788

The beginning!.... THANKS

Continual Improvement Environmental Management System



Appendices

- I. Instructor Biographies
- II. DOD EMS Policy
- III. Navy EMS Policy
- IV. DOD Metrics



Tetra Tech EM Inc.

1881 Campus Commons Drive ♦ Suite 200 ♦ Reston, VA 20191
(703) 391-5875 ♦ FAX (703) 391-5876

INSTRUCTOR BIOS

Mr. Wood and Mr. Kemp have participated on teams that have conducted initial EMS reviews, assessed the environmental aspects of company operations, identified the gaps between company environmental management systems and the ISO 14001 standard requirements, and identified the legal requirements during compliance reviews. They have been integrally involved in several full implementation projects that included project manager responsibilities, procedure manual development, and the development and presentation of customized EMS training.

Phil Wood, CHMM: Mr. Wood has nearly 20 years' progressive responsibility in environmental programs with an emphasis on industrial and regulatory compliance and permitting. With his prior employer, this included project management, and scope and budget development for several environmental and EMS task orders with the Navy's Atlantic Division Headquarters in Norfolk, VA. He coordinated the implementation of an ISO 14001-based EMS at eight U.S. Navy bases in Europe. As one of the U.S. delegates for the International Standards Organization committee for the development of the 14000 series on environmental management systems he is well versed in EMS. On behalf of CINCUSNAVEUR, he was also a member of the Department of Defense committee that established pilot schemes to evaluate the benefits of implementing an EMS based on ISO 14001.

Harry Kemp, CHMM: Mr. Kemp has more than 24 years of management experience with environmental organizations. Armed with a business management degree from the University of Utah he gained his first systems experience managing hazardous waste treatment storage and disposal facilities from the late 1970's into the early 1990's. As facility manager, he has utilized environmental management systems to operate within permitted parameters, including system auditing, to ensure conformance. Since 1995, Mr. Kemp has been integrally involved in numerous EMS implementation projects, most notably for the European command of the U.S. Navy at their installations. He also conducts third party ISO 14001 certification audits under contract to an accredited registrar. Mr. Kemp's skills in business management and systems development and implementation are complemented by his many years of experience in the environmental and health and safety fields.

DOD EMS Experience

CINCUSNAVEUR, London, England

Working with LANTDIV personnel, developed the approach and pursued EMS implementation at United States Naval Bases in the European command in England, Spain, Italy, and Greece in support of the Navy Implement Team. The training and implementation support activities, including aspect assessments using a database tool developed for the Navy, has been provided to personnel at seven bases in Greece, Italy, Spain and England. This project has been challenging due to the naval command structure and the make up of organizations on bases, which includes the military command, civil servants, contractors, host nationals, and tenant commands from other branches of the military. The current stage of the project includes document development and EMS Review assist visits to the naval bases. The EMS being implemented is based on the ISO 14001 standard.

U.S. Navy: Developed and presented for U.S. Navy bases in Europe, the Atlantic and Northern Divisions Naval Facilities Engineering Command, Commander Navy Region Mid-Atlantic, and CINCLANFLT:

- An "Introduction to EMS" training course for the Navy command structure
- A two-day "How to implement an EMS" for the implementation team, and

- A four-hour "Introduction to EMS" for "process owners" (base personnel)
- CECOS, Port Hueneme, CA: Developed a three-day EMS Review training course.
- CECOS, Port Hueneme, CA: Developed a one-day EMS overview course based on the Navy EMS Guide.

Naval School, Civil Engineer Corps Officers, Port Hueneme, CA

Developed the three day EMS Review training course for Navy personnel who will conduct external assessments of installations under Chapter 20 of OPNAVINST 5090.1B. The course complements the Environmental Quality Assessment (EQA) Guidance manual and includes a student manual, an instructor manual, a case study with exercises, and appropriate handouts. Since the technical review by 35 military and civil servant Navy personnel in June 2000 there have been 12 offerings of the course. Four more offerings are scheduled for 2003.

NAVSTA Rota, Spain

Using EMS concepts, the draft internal assessment plan (IAP) for this installation was developed in conformance with OPNAVINST 5090.1B CH-2, Chapter 20 and the U.S. Navy EQA Guide. This self-correcting compliance based process depends on involvement at the lowest level of execution possible.

U.S. Army Military District Washington

Developed and facilitated a two-day training and EMS strategy session for HQMDW staff and MACOM installation environmental chiefs. The first day raised the awareness of key personnel to the ISO 14001 EMS and the reasons and requirements driving the Army's EMS implementation. The second day focused on policy development, roles and responsibilities and the development of a MACOM wide implementation strategy. Provided a draft strategic plan for presentation to the commander and use in budgeting. Conducted an ISO 14001 Gap Analysis of HQMDW and four Operational Units

Army Test and Evaluation Command (ATEC)

Tasked to support strategic environmental management system development. Provided EMS awareness training for upper and middle management from ATEC, Developmental Test Command (DTC) and Operational Test command (OTC). Completed a gap analysis against ISO 14001 for the ATEC HQ, DTC, ATC Aberdeen Proving Ground, MD, White Sands Missile Range, NM, and Dugway Proving Ground, Utah.

Fort Hood, Texas

Tasked to support and facilitate the strategic implementation of an EMS to support development of a sustainable installation. Provided EMS awareness training for upper and middle management. Completed a gap analysis against ISO 14001, provided a draft implementation plan along with key implementation and system performance metrics.

EMS Experience with Private Industry

Both Mr. Kemp and Mr. Wood have extensive broad based environmental experience, including EMS development, implementation, and training. This information will be provided on request.

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ACQUISITION,
TECHNOLOGY
AND LOGISTICS

THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

05 APR 2002

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
ASSISTANT SECRETARIES OF DEFENSE
GENERAL COUNSEL OF THE DEPARTMENT OF
DEFENSE
INSPECTOR GENERAL OF THE DEPARTMENT OF
DEFENSE
DIRECTOR, OPERATIONAL TEST AND EVALUATION
DIRECTOR, ADMINISTRATION AND MANAGEMENT
DIRECTORS OF DEFENSE AGENCIES

SUBJECT: Department of Defense Environmental Management System

The Department of Defense (DoD) must recognize and seize opportunities to enhance its overall mission performance through better environmental management. Environmental management must become an active tool for mission effectiveness and efficiency. Systematic environmental management must be an integral part of our day-to-day decision-making and long-term planning processes across all missions, activities and functions. To that end, DoD Components shall adopt an environmental management system and work to integrate it in all core business areas. Our goal is to establish robust systems that sustain compliance, avoid risk and pollution, inform the public, and promote interoperability among the DoD Components, other nations' militaries, and with industry.

Recognizing the diversity of our missions, each DoD Component shall implement an environmental management system that best suits its mission needs. Although it is not a requirement, DoD Components are encouraged to implement a complementary management system for safety and occupational health. They may also adopt the International Organization for Standardization Environmental Management System Standard, ISO 14001; however, DoD Components should pursue third party registration only when it provides a clear and documented benefit to the mission.

At a minimum, DoD Components shall implement a documented environmental management system meeting the requirements of Executive Order 13148, "Greening the Government Through Leadership in Environmental Management." In addition, each



DoD Component's environmental management system shall include the following elements:

- Public commitment by senior leaders to environmental compliance, pollution prevention, and continual improvement of the management system;
- Integrated planning, including goals and targets for reducing environmental impacts and supporting mission priorities;
- Operations to assure attainment of those goals and targets, and training to ensure individual competence and responsibility;
- Procedures for self-evaluation and corrective action, including priority inclusion of identified needs in budget processes; and
- Periodic review of the management system by senior leadership, with recommendations for improvement and publication of the review.

The importance of our missions demands this commitment to continual improvement in our environmental management systems. This is an untapped resource for improving our overall mission performance. Your leadership in achieving the full potential of this initiative is essential.

A handwritten signature in black ink, appearing to read "E. C. Aldridge, Jr.", with a stylized flourish at the end.

E. C. Aldridge, Jr.



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
2000 NAVY PENTAGON
WASHINGTON, D.C. 20350-2000

IN REPLY REFER TO

5090

Ser N451G/1U595831

06 DEC 2001

From: Chief of Naval Operations

Subj: NAVY ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS) POLICY

Ref: (a) Executive Order 13148, Greening the Government
through Leadership in Environmental Management,
of 21 Apr 2000

(b) OPNAVINST 5090.1B CH-2, Environmental and Natural
Resources Program Manual, of 9 Sep 1999

1. An Environmental Management System (EMS) is a formal management framework intended to help an organization achieve its internal environmental goals through repeatable and consistent control of its operations. EMS as employed by the Navy systematically uses five basic components to achieve full compliance with legal requirements and continual improvement in mission performance by reducing environmental risks and costs inherent to mission processes. They are:

- a) Policy: Public commitment by senior leaders to environmental compliance, pollution prevention, and continual improvement of the management system;
- b) Planning: Integrated planning, including development of goals and targets for reducing environmental impacts and supporting mission priorities;
- c) Implementation: Operations to assure attainment of those goals and targets, and training to assure individual competence and responsibility;
- d) Checking and Corrective Action: Procedures for self-evaluation and corrective action, including priority inclusion of identified needs in budget processes; and
- e) Management Review: Periodic review of the management system by senior leadership, with recommendations for improvement and publication of the review.

2. Reference (a) requires Federal agencies to implement an EMS at all appropriate agency facilities by 31 December 2005.

Reference (a) applies to "all appropriate agency facilities

Subj: NAVY ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS) POLICY

based on facility size, complexity, and the environmental aspects of facility operations ... in any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, [and] the Northern Mariana Islands." An "appropriate agency facility" is any facility that has registered an environmental requirement with the Environmental Protection Agency or a regional, state or local regulatory authority. Examples include but are not limited to air, water, wastewater, storm water, and hazardous waste permits or acknowledgement of hazardous waste generation. For Navy, "appropriate agency facilities" means Navy shore installations and/or regional complexes covered by the Navy's Environmental Quality Assessment (EQA) Program per reference (b) in any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, and the Northern Mariana Islands. Navy installations and regional complexes outside of these areas are encouraged to make best efforts to comply with the goals of reference (a) within existing resources.

3. Consistent with reference (a), appropriate Navy shore installations and/or regional complexes shall implement an EMS by 31 December 2005 that incorporates the basic components enumerated in paragraph 1. The Navy EMS framework described in paragraph 6 below is a cost effective approach that supports mission and operational requirements at the installation or regional complex. Other recognized EMS frameworks are the Code of Environmental Management Principles for Federal Agencies (CEMP), the International Organization for Standardization Environmental Management System Specifications (ISO 14001), the European Union's Eco-Management and Audit Scheme (EMAS), the Malcolm Baldrige National Quality Improvement Act criteria, and various State-defined EMS.

4. Each Navy shore installation and/or regional complex implementing an EMS must develop an EMS description document and complete at least one management review by 31 December 2005. An EMS description document is a summary that describes the system's core elements, and how the elements relate to each other. It may take the form of an EMS Manual, or be a shorter document that provides references to other documents or procedures.

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5. EMS implementation at appropriate Navy shore installations and/or regional complexes will be evaluated under the Navy's Environmental Quality Assessment (EQA) Program as required by reference (b). Procedures and responsibilities for the conduct of these assessments are provided in the EQA Guide, issued 31 August 1999. In addition, Major Claimants will be required to provide CNO periodic updates on status of EMS implementation.

6. Formal certification of an EMS by an organization not affiliated with the one seeking certification, a "third party," consists of a number of steps including application, pre-audit, audit, and surveillance and is a recurring cost to the organization seeking and maintaining certification. Third party certification is not required by reference (a). Mission-funded activities will not seek or fund third party certification. A Navy Working Capital Fund activity may pursue third party certification only if it can demonstrate that third party certification is a good business decision.

7. The Navy EMS framework is based on requirements found in reference (b) and incorporates principles embodied in CEMP and ISO 14001. Guidance for implementing an EMS using the Navy EMS Framework is currently being developed by CNO and will be available in fiscal year 2002. The framework for the Navy EMS, with its five major components and sixteen specific elements, is:

5 Components

16 Elements

1. Policy

1. Policy Statement

2. Planning

2. Requirements

3. Practices, Processes, Resources
and Impacts (Aspects and Impacts)

4. Pollution Prevention Opportunities

5. Objectives and Targets

6. Planning, Programming and
Budgeting System (PPBS)

3. Implementation

7. Structure, Responsibilities and
Programs

8. Training

9. EMS Documentation, Document
Control and Records

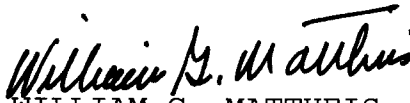
10. Communication

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- | | |
|-----------------------------------|---|
| | 11. Standard Operating Procedures |
| | 12. Emergency Preparedness and Response |
| 4. Checking and Corrective Action | 13. Monitoring and Measurement |
| | 14. Problem/Cause Identification/Corrective/Preventive Action |
| | 15. EMS Review |
| 5. Management Review | 16. Management Review |

8. Systematic environmental management as an integral part of our day-to-day decision-making and long term planning processes is an important step in supporting mission readiness and effective use of our resources. A robust EMS is essential to sustaining compliance, reducing pollution and avoiding risk. In addition, EMS implementation supports the 2001 Quadrennial Defense Review objective of modernizing Department of Defense business processes to revitalize national defense.

9. The point of contact for EMS implementation is Ms. Tami McVey. Ms. McVey can be reached at DSN 664-5411, commercial (703) 604-5411, FAX (703) 602-2676, or by e-mail at mcvey.tami@hq.navy.mil.


WILLIAM G. MATTHEIS
By direction

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ACQUISITION,
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OFFICE OF THE UNDER SECRETARY OF DEFENSE

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30 JAN 2003

MEMORANDUM FOR DEPUTY ASSISTANT SECRETARY OF THE ARMY
(ENVIRONMENT, SAFETY AND OCCUPATIONAL
HEALTH)
DEPUTY ASSISTANT SECRETARY OF THE NAVY
(ENVIRONMENT)
DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE
(ENVIRONMENT, SAFETY AND OCCUPATIONAL
HEALTH)
DIRECTOR, ENVIRONMENT AND SAFETY,
DEFENSE LOGISTICS AGENCY

SUBJECT: Environmental Management System (EMS) Implementation Criteria and Metrics

The Department's EMS Implementation Criteria and Metrics are attached for your action. They are the product of nearly a year of deliberation by the DoD EMS Work Group. I want to thank the entire Work Group and the staffs of the Military Departments and other DoD Components for their support, insight and expertise in achieving this milestone.

We are issuing the EMS Implementation Criteria and Metrics to guide progress and measure performance during the early stages of EMS implementation. Consistent with policy established in the DoD EMS memo of April 5, 2002, fulfillment of each of the six criteria at each appropriate facility by December 31, 2005, is the minimum necessary to meet the Executive Order (EO) 13148 EMS implementation requirement. We view our implementation metrics and EO 13148 compliance as initial milestones in a continual improvement process that will enhance mission performance through excellence in environmental management.

We look forward to an initial assessment of your progress on the EMS Implementation Criteria and Metrics during the FY03 first-half DUSD(I&E) In Progress Review (IPR). If you have questions, please contact Mr. John Coho, (703) 604-1630, John.Coho@OSD.mil.

John Paul Woodley, Jr.
Assistant Deputy Under Secretary
of Defense (Environment)

Attachment:

~~Draft~~ EMS Implementation Metrics

cc: Directors of the Defense Agencies



DoD Environmental Management System (EMS) Implementation Criteria and Metrics

OSD and DoD Components will track EMS implementation using the following Implementation Criteria:

1. An environmental policy statement consistent with DoD and Component EMS policies.
2. A self-assessment consistent with DoD and Component EMS Policies.
3. A written plan with defined dates, identified resources, and organizational responsibilities for implementing an EMS consistent with DoD and Component Environmental Management System policies.
4. A prioritized list of aspects¹.
5. Appropriate installation personnel have received awareness-level EMS training.
6. Completed at least one management review in accordance with the installation's documented procedure for recurring internal EMS management review.

OSD and DoD Components will track EMS implementation using the following Implementation Metrics:

1. Percentage of appropriate facilities with an environmental policy statement consistent with DoD and Component EMS policies.
2. Percentage of appropriate facilities with a self-assessment consistent with DoD and Component EMS Policy.
3. Percentage of appropriate facilities with a written plan with defined dates, identified resources, and organizational responsibilities for implementing an EMS consistent with DoD and Component Environmental Management System policies.
4. Percentage of appropriate facilities with a prioritized list of aspects.
5. Percentage of appropriate facilities where appropriate installation personnel have received awareness-level EMS training.
6. Percentage of appropriate facilities that have completed at least one management review in accordance with the installation's documented procedure for recurring internal EMS management review.

Supporting information:

- These metrics are intended to be reported as part of the semi-annual DoD In-Progress Review (IPR). The first report will be required in the FY03 first-half IPR.
- All data reported in IPRs must be auditable through the respective Component chains of command to appropriate facility-level records.
- Each Component will report its baseline number of “appropriate facilities,” and the basis for determining “appropriateness,” with the first data submittal, and updates (to include explanation of changes in the baseline), as necessary, at each subsequent IPR.
- These metrics should be viewed as a first step in DoD-level management oversight of EMS implementation. Consistent with DoD EMS Policy, they will be subject to recurring internal management review and continual improvement.

¹Aspect: An element of an organization’s activities, products or services that can interact with the environment.